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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,268	05/31/2001	Man Tai Vincent Lam	2030.42	2199
<div>Daniel R Brown PO Box 821130 Fort Worth, TX 76182</div>				
<div>7590 07/27/2007</div>			<div>EXAMINER MEI, XU</div>	
			<div>ART UNIT 2615</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE 07/27/2007</div>	<div>DELIVERY MODE PAPER</div>

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p>09/871,268</p>	<p>Applicant(s)</p> <p>VINCENT LAM, MAN TAI</p>	
	<p>Examiner</p> <p>Xu Mei</p>	<p>Art Unit</p> <p>2615</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,7,9,10,12-15,17,19,20,32,34,36 and 37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-15,17,19,20,32,34,36 and 37 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7,9,10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to the applicant's amendment dated 05/08/2007.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2, 4, 7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kintis.

Regarding claim 2, Kintis discloses a dual carrier wireless transmitter apparatus, comprising: modulators (25), oscillators (27), that indicates modulating a first channel with a first carrier frequency; a second channel with a second carrier frequency; the signals are summed together by a broadly claimed high isolation combiner (i.e., summer 30) and produced a single output that are output through an antenna (inherently included for wireless communication). The different amplifiers (28) used to amplify the modulated carrier signals for each individual channel prior inputted to the high isolation combiner is also shown as in Fig. 1. What's not shown by Kintis is the oscillators are voltage controlled oscillators. However, voltage controlled oscillator (VCO) is old and

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well known in the art for used in signals modulation in a transmitter. The Examiner take office notice that it would have been obvious to one of the ordinary skill in the art at the time the invention was made to used the old and well known VCOs for signals modulation in the transmitter of Kintis.

Regarding claim 4, the use of dielectric resonator oscillator was also old and well known in the art. The Examiner take office notice that it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Kintis by implementing a dielectric resonator oscillator for the purpose of providing optimal stability.

Regarding claim 9, see col. 3, lines 8-13 of Kintis.

Regarding claim 10, the analog input signals as disclosed by Kintis are being between 50Hz to 20kHz.

Regarding claim 7, Kintis discloses the wireless transmitter apparatus, and method thereof, as discussed in claim 2 above. What's not taught by Kintis is the first oscillator having a first oscillator frequency band of 150 KHz deviates from the second oscillator. However, it is old and well known in the art that two different oscillators in one wireless transmitter is being oscillating at different frequency ranges in order to prevent overlapping of signals being transmitted. Therefore, the Examiner take office notice that it is obvious to one of ordinary skill in the art to designs the different oscillators of Kintis with different frequency base band/range, by a optimal or desired

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frequency different (150 KHz, for example), in order to prevent overlapping of signals being transmitted.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kintis in view of Kroeger et al (US-6,178,317, hereafter, Kroeger).

Regarding claim 1, Kintis discloses the wireless transmitter apparatus, and method thereof, as discussed in claim 2 above. What's not shown by Kintis is the transmitter apparatus and method thereof including a receiver system, and regenerating the first channel and the second channel of signals in the system by separating one from the other. However, wireless communication system having both transmitter and receiver is old and well known in the art. Kroeger discloses a wireless communication system that is including the old and well known transmitter and receiver (see Fig. 1) that is demodulating the received signals and regenerated them back to their original form for user. It would have been obvious to one of ordinary skill in the art to modify the transmitter apparatus of Kintis with an old and well known wireless receiver, as shown by Kroeger, in order to demodulating the received signals and regenerated them back to their original form for user.

Allowable Subject Matter

5. Claims 12-15, 17, 19-20, 32, 34, 36-37 are allowed.

Response to Arguments

5. Applicant's arguments filed 05/08/2007 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., specific functionality of the high isolation combiner as argued) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The broadly claimed 'high isolation combiner' is clearly can be read on by summation module or combiner 30 that is combining each of the individually modulated signal or high isolation signal.

Applicant further argued that 'Kintis et al do not teach or suggest that the output of the summing junction is coupled to a single antenna as claimed in every one of the rejected claims', the Examiner disagreed. It's true that Kintis et al teaches that the output of the summer junction is coupled to a power amplifier 31 and then in-turn coupled to an antenna output, as mentioned by the applicant. And this interpretation is clearly read on the claimed language of "coupling the combined signals from the high isolation combiner to a single antenna output" as Kintis et al teaches the output of the summer junction 30 is coupled to an antenna output, even though not directly. However, such limitation (direct coupling of the summing junction to the antenna) is not recited in the claims, it's deemed this argument not persuasive and Kintis et al is read on the claimed limitation.

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As these are the totality of arguments presented, and they have been found unpersuasive, the existing rejection is deemed appropriate.

Conclusion


6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xu Mei whose telephone number is 571-272-7523. The examiner can normally be reached on maxi flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Xu Mei
Primary Examiner
Art Unit 2615
07/11/2007